Think global, act local
Building a sustainable and inclusive system for scholarly communication

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COAR is an international association that brings together individual repositories and repository networks in order to build capacity, align policies and practices, and act as a global voice for the repository community.

- Office is based in Germany / Portugal
- Over 150 members and partners
- All 5 continents
- www.coar-repositories.org
Research is global

At the Heart of Global Research and Education Networking

GÉANT

DANTE www.dante.net
GÉANT www.geant.net

connect • communicate • collaborate

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Many of the world's most critical challenges must be addressed globally.

Climate change: “Between 2008 and 2014, more than 25 million people per year were uprooted because of rapid-onset disasters such as floods and storms.” (International Displacement Monitoring Center)
...But research is also local
Nepalese research outputs - with Major Clusters

Number of publications: 3,011
Years: 2004-

Image produced by Pitambar Gautam, Hokkaido University, Sapporo, Japan

Word maps created using VosViewer, a free software (Leiden University), Vaby Eck & Waltman (2010)
e.g. Chagas Disease
“Neglected tropical diseases affect more than 1 billion people, primarily poor populations living in tropical and subtropical climates... More than 70% of countries and territories that report the presence of neglected tropical diseases are low-income or lower middle-income economies.”
The Canadian Journal of Native Studies is a highly recognized journal in the field of Native Studies. It began as a publication of the Society for the Advancement of Native Studies which is no longer in operation and whose founder; Sam Corrigan; was the Chief Editor from 1981-2008. It comes out on a bi-annual basis, and publishes original research which is refereed by peer review.

As a general focus, the journal publishes anthropological, historical, sociological, political, legal, education and cultural issues affecting First Nations people. Although the majority of articles deal with Indigenous peoples in Canada, it also publishes articles dealing with Indigenous peoples worldwide.
The scholarly communication is extremely unbalanced!
The Rise of Big Publishers in Development and What is at Stake: A Development Perspective
By: Denisse Albornoz, Research Associate at OCSDNet

This assumption also denies the lack of diversity in international research. When researchers gain access to the international scientific journals, they are not gaining access to a repository of knowledge that is representative of the plurality and diversity of knowledge and science produced around the world. Rather, they are dealt with articles that do not include Global South perspectives, giving more visibility and thus legitimacy to knowledge from the Global North. This again reaffirms the idea that the Western-centric mode of producing science is the model local research needs to follow in order to reach its potential, a rationale that has strong cultural and social implications for what researchers and the general public understand as valid and legitimate knowledge.
Can open access/open science address the problem of inequity?
VISION

OA2020 is a global alliance committed to accelerating the transition to open access.

MISSION

We collaborate to transform the current publishing system, replacing the subscription business model with new models that ensure outputs are open and re-usable and that the costs behind their dissemination are transparent and economically sustainable.
Costs of Article Processing Charges

Jisc 2016: Average APC cost was about £1745 (~$2400 US)
Elsevier’s profits swell to more than £900 million

But ‘risks’ of open access and a shift away from subscription model could halt growth, publisher’s financial results reveal

February 20, 2018

By David Matthews
Twitter: @DavidMjourn

> 1.2 billion US
Is neoliberalism destroying the world?

CBC Radio · Posted: Sep 26, 2018 3:48 PM ET | Last Updated: August 30
Research assessment based on “high impact factor” journals

ARWU is an influential ranking list of world universities compiled by Shanghai Jiao Tong University (SJTU). Each year, the top 500 universities in the world are ranked based on a set of criteria:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Indicator</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Education</td>
<td>Alumni of an institution winning Nobel Prizes and Fields Medals</td>
<td>10%</td>
</tr>
<tr>
<td>Quality of Faculty</td>
<td>Staff of an institution winning Nobel Prizes and Fields Medals</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Highly cited researchers in 21 broad subject categories</td>
<td>20%</td>
</tr>
<tr>
<td>Research Output</td>
<td>Papers published in Nature and Science (not for institutions specialized in humanities and social sciences)</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Papers indexed in Science Citation Index-expanded and Social Science Citation Index</td>
<td>20%</td>
</tr>
<tr>
<td>Per Capita Performance</td>
<td>Per capita academic performance of an institution</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

“The pressure to publish in "luxury" journals encourages researchers to cut corners and pursue trendy fields of science instead of doing more important work.”

(Randy Schekman, University of California, Berkeley)
Education, research, and knowledge are critical for sustainable development

But our system for sharing and disseminating knowledge must also be sustainable
“You cannot solve a problem from the same consciousness that created it. You must learn to see the world anew.”
Our Vision

Build a global knowledge commons

“...position repositories as the foundation for a distributed, globally networked infrastructure for scholarly communication, on top of which layers of value added services will be deployed, thereby transforming the system, making it more research-centric, open to and supportive of innovation, while also collectively managed by the scholarly community.”
Not exactly a new vision...

“a relatively complete raw archive unfettered by any unnecessary delays in availability”, on top of which “[a]ny type of information could be overlayed ... and maintained by any third parties”, including tools for validation, filtering and communication (Ginsparg, 1994)
This means unbundling the scholarly journal

5 functions of scholarly publishing:

1. Registration
2. Certification
3. Awareness
4. Archiving
5. Rewarding

Why do all of these functions have to be centralized?
Addresses three critical issues

Institutions provide stable funding and long term access to content

Research communities provide peer review and networking

Libraries as an Open Global Platform

“... The MIT Libraries must operate as an open, trusted, durable, interdisciplinary, interoperable content platform that provides a foundation for the entire life cycle of information for collaborative global research and education.”
Overlay journals

“The editors of an overlay journal locate suitable material from open access repositories and public domain sources, read it, and evaluate its worth. This evaluation may take the form of the judgement of a single editor or editors, or a full peer review process.” (Wikipedia: “Overlay Journal”, accessed Oct 2019)

- Built on arXiv
- No charges for readers or authors
- Authors submit articles
## Advances in Combinatorics - Estimated Costs

<table>
<thead>
<tr>
<th>Expense</th>
<th>CAD</th>
<th>USD</th>
<th>Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholastica subscription</td>
<td>$1597.42</td>
<td>$1188.00</td>
<td>€1060.19</td>
</tr>
<tr>
<td>Scholastica author submission fees</td>
<td>$336.18</td>
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<td>€223.13</td>
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<tr>
<td>Domain name</td>
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<td>$8.18</td>
<td>€7.30</td>
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<tr>
<td>In-kind staff</td>
<td>$1073.8</td>
<td>$798.8</td>
<td>€712.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3018.4</strong></td>
<td><strong>$2244.98</strong></td>
<td><strong>€2003.42</strong></td>
</tr>
</tbody>
</table>

*This is the same price (or less) than 1 APC article*

*Estimates do not include the cost of running arXiv*
Pubfair

A distributed framework for open publishing services

Version 2, November 27, 2019

By Tony Ross-Hellauer, Benedikt Fecher, Kathleen Shearer, and Eloy Rodrigues
Next generation repositories

To participate in this system, repositories need to adopt common technologies, standards and behaviours
We want networks, but the right kind of networks...
What is different from Paul Ginsparg’s original 1994 vision?

This is not about,

• A single platform, server, or repository
• Building a centralized service
• Supporting a single domain or discipline

This is about,

• Connecting Individual “resources” in a highly distributed environment
• Ensuring Interoperability (through common vocabularies, protocols and standards)
• Supporting a variety of community-defined peer review and assessment processes
This “system” is flexible and can scale: geographically, different content types, across disciplines, different languages...
At COAR we recognize and celebrate the diversity of our community. At the same time, we understand that diversity cannot thrive unless it is fostered in an intentional way, through strong coordination.
Beyond Open Access
Five Prerequisites for a Sustainable Knowledge Commons

Open access is about the democratisation of knowledge. However, as open access becomes widely adopted, there is a risk that we will accentuate the inequalities and unsustainability of scholarly publishing, through widespread implementation of pay to publish business models.

1. Strengthen local institutions-based services that preserve and provide access to diverse and valuable research products

2. Connect the local services to national, regional and global networks through the adoption of interoperable standards and practices

3. Begin to redistribute funds towards services that add value to the networks, such as peer review

4. Improve the processes used to evaluate research contributions to include a wider range of qualitative and quantitative metrics and indicators

5. Adopt the principles and governance that will ensure the commons reflects the needs of the global research community

We recognize the need to go beyond open access, to create an open and fair system for sharing research outcomes. Our Ecological Framework for Open Access Reflections (COAR) is a collaborative effort to develop a new paradigm for scholarly communication.
Thank you

Ngiyabonga